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Accenture/Finnegan, Henderson, Farabow, Garrett & Dunner, LLP 901 New York Avenue Washington, DC 20001-4413			EXAMINER	
			MCPhillip, Adrian J	
			ART UNIT	PAPER NUMBER
			3623	
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			07/22/2011	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

betty.finley@finnegan.com  
dianna.williams@finnegan.com  
catherine.vanhouten@finnegan.com

### Office Action Summary

**Application No.**

10/767,661

**Applicant(s)**

SVILAR ET AL.

**Examiner**

ADRIAN MCPHILLIP

**Art Unit**

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 April 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4,7,9-11,13,16,19,21-23 and 25-41 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,7,9-11,13,16,19,21-23 and 25-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This Final Office Action is in response to Applicant's communication filed on April 15, 2011. Claims 1, 7, 13, 19, 25-26, 33 and 40-41 have been amended. Claims 2-3, 5-6, 8, 12, 14-15, 17-18, 20 and 24 have been cancelled. Currently claims 1, 4, 7, 9-11, 13, 16, 19, 21-23, and 25-41 are pending in this application.

#### ***Response to Amendment***

2. Applicant's amendment to claims 1, 7, 13, 19, 25-26, 33 and 40-41 are hereby acknowledged and found sufficient to overcome the rejections previously issued under 35 USC 112, first paragraph. Accordingly these rejections have been withdrawn.

#### ***Response to Arguments***

3. Applicant's arguments filed 4/15/2011 have been fully considered. Applicant's arguments with regard to the previously issued 112, first paragraph rejections are found persuasive and these rejections have been withdrawn.

4. Applicant argues that Schroeder's system pertains to predicting profit while the instant claims recite the effect of change in spending on consumer demand, retail load adjustments, and shipments (see page 23 of Remarks). This argument is unpersuasive because Schroder models and utilizes the changes in demand, retail load adjustments and shipments to ultimately determine the change in profit associated with certain marketing plans. Therefore the teachings of Schroeder are not of a different nature as alleged by the Applicant, they are simply applied to an actual practical implementation and provide a useful scenario to which the Applicant's claimed techniques can be applied.

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5. Applicant continues to argue the Examiner's usage of Official Notice to teach that it was well known to those of ordinary skill in the art to calculate and display percent errors between forecasted data and actual data. Despite the Examiner providing a reference (Gatto US 20030065601 A1) that explicitly discloses a security analyst performance tracking and management system where one embodiment comprises a graphical display with a vertical axis displaying a measure of the average percent error, both positive and negative, of the estimate for each analyst displayed as compared to actual earnings (see at least ¶ [0110]-[0111]), the Applicant continues to argue this well known limitation. Applicant's rationale for why calculating and displaying percent errors between forecasted data and actual data was not well known, despite being explicitly disclosed by Gatto, is that, "The mere presence of "percent error" in Gatto, however, does not necessarily mean that the technique was "well-known." Indeed, if the applicants of Gatto felt the technique was well-known, then they would not have claimed a "means for pre-calculating predetermined analyst- performance metrics [(e.g., percent error)] from the data," as in Gatto's published claim 1" (see page 22 of Remarks submitted 4/15/2011). It is first noted that the Applicant admits, "the presence of percent error in Gatto," but never actually discusses why the cited percent error calculations disclosed and displayed in ¶ [0110]-[0111] do not disclose calculating and displaying percent errors between forecasted data and actual data. Instead the applicant alleges that there is some direct link between the information in Gatto's disclosure and the subsequently claimed limitations. This is an unpersuasive argument because an applicant may choose to claim, or not claim, a particular embodiment in a written disclosure for any number of reasons. None of these reasons however changes the fact that a written disclosure can, and usually does, contain

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far more information than what is ultimately claimed. Therefore it is completely unreasonable to draw conclusions about a disclosure's content based solely on what is claimed since claimed limitations rarely ever represent every single piece of information that is disclosed by an associated written description. The Applicant has failed to explicitly address the specific evidence presented by the Examiner (specifically ¶ [0110]-[0111]), who maintains that Gatto is evidence of the fact that calculating and displaying percent errors between forecasted data and actual data is of such notorious character that it is capable of instant and unquestionable demonstration. Accordingly, this argument is found unpersuasive and the rejection(s) is/are maintained.

6. Applicant also argues that none of the cited references teaches or suggests, “the at least one marketing plan compris[ing] at least two marketing elements” and “using econometric modeling ... to quantify the relative effect of the at least two marketing elements on shipments.” (see page 26 of Remarks) The Examiner respectfully disagrees and notes first that the section of the prior art cited for teaching a marketing plan comprising at least one marketing element was similarly applied to the limitation requiring the plan to comprise at least two elements. The section relied upon included ¶ [0057]-[0058] and fig. 1, wherein it is disclosed that marketing plans include multiple promotional types and models are analyzed to determine the effect of the plans on a variety of metrics. ¶ [0058] discloses in part that, “Prediction of increased sales, or sales lift, due to a promotion is achieved using mathematical models for market response to a set of promotion conditions, with a plurality of promotion types being available in the model.” First, the usage of the plural term “set of conditions” makes it clear that there are at least two elements/conditions of the plans being considered, furthermore each plan

being modeled may contain a combination of the many promotion types disclosed in ¶ [0018]-[0030], which would also mean that there are at least two marketing elements. ¶ [0057] further discloses personnel elements and time interval elements while ¶ [0058] mentions that the lift models being utilized to analyze the plan(s) are subject to multivariate analysis which also suggests that there are multiple variables/elements to each of the plans. Therefore this argument is unpersuasive because the plans disclosed by Schroeder clearly have at least two elements including time elements, personnel elements, promotional type elements and a variety of other elements that are modeled using multivariate analysis to predict the impact of these elements on certain metrics.

7. Applicant's remaining arguments are directed to features which have been newly added via amendment, specifically:

- Capturing actual consumer demand, retail-load adjustments and shipment data;
- Using econometric modeling to quantify the effect of the at least one marketing element on shipments based on historical marketing spend data and historical shipment data; and
- Forecasting retail-load adjustments, the actual retail-load adjustments, and a second percent error between the forecasted retail-load adjustments and the actual retail-load adjustments.

Therefore this is now the Examiner's first opportunity to consider these limitations in view of the prior art and as such any arguments regarding these limitations is premature since they have not yet been examined. A full rejection of these limitations in view of the prior art will be presented later in this Office Action.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 13, 16, 19 and 21-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are directed to a system but only recite a plurality of modules embodied on a computer readable medium which makes the claims seem like they are directed to a software/computer program embodiment as opposed to a structural system embodiment. Claims 25 and all of its dependent claims are specifically directed to a computer program product and the Examiner is unclear (1) what structural components actually comprise the Applicant's claimed system and (2) how the system of software modules embodied on a computer readable medium are different from the computer program embodiment recited in claim 25 and its respective dependent claims. Clarification is required.

It is further noted that if the Applicant intends the computer-implemented system claims to be directed to an actual physical system that there is not support for such an embodiment in the specification. A customized software tool, while inherently disclosing the usage of basic components to achieve the disclosed functionality, does not provide the Applicant with support for claiming a hardware implementation of a tool that employs or runs the customized software tool. A customized software tool is not the same as a customized hardware tool and reasonably only supports methods of using a customized software tool with the minimum requirements necessary for it to function, or a

computerized software embodiment of the claimed invention. Therefore if the Applicant intends the system claims to be directed to a hardware implementation of the customized software tool then there will be no support for such an implementation and a 112, first paragraph rejection will be issued accordingly.

***Claim Rejections - 35 USC § 101***

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. Furthermore, claims 13, 16, 19, 21-23, and 25 are rejected under 35 U.S.C. 101 as being directed towards non-statutory subject matter. Claims 13, 16, 19, 21-23, and 25 are directed toward functional descriptive material, specifically: a computer implemented system comprising modules embodied on a computer readable medium. Modules embodied on a computer readable medium, wherein the medium could be directed to waves, signals and other such non-statutory transmission media, do not imply any type of specific structure. Therefore the claims do not positively recite elements that necessarily constitute the structure of a system or apparatus, rather, the claims could be directed to software. *Software per se* is not patentable under § 101; therefore, the claimed invention does not fall within a statutory class of patentable subject matter.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:



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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. Claims 1, 4, 7, 13, 16, 19, 25-29, 33-36 and 40-41 are rejected under 35 U.S.C.

103(a) as being unpatentable over Schroeder et al. (US 2003/0130883) – hereinafter

Schroeder, in view of Examiner's Official Notice as supported by Gatto (US

20030065601 A1).

15. Regarding **claim 1 and 13**, Schroeder discloses a computer-implemented method

and system for using econometric techniques to quantify marketing drivers and forecast

consumer demand (see ¶ [0073]), retail-load adjustments (see ¶ [0043], [0102]) and

shipments (see ¶ [0073]), comprising:

- providing at least one marketing plan, wherein the at least one marketing plan comprises at least one marketing element (see paragraphs 57-58 and fig 1 wherein proposed promotions/marketing plans are entered into the modeling system. It is further noted that the reference discloses the marketing plans having multiple, i.e. two or more, elements. ¶ [0057] discloses personnel, geographic and time elements associated with each plan. ¶ [0058] discloses a

POS data element, a historical element, and a forecasting element, and even discloses an embodiment that utilizes a 67 variable/element model to predict how a plan will be affected due to a particular promotion.);

- using econometric modeling to quantify, by a processor, the effect of the at least one marketing element on shipments (see paragraph 50 wherein the predicted effects of the promotion in question are determined and include an analysis of expected ship quantities. Furthermore paragraph 39 discloses using regression as a method of analyzing the data in question) based on historical marketing spend data and historical shipment data (see ¶ [0092], [0104] and claims 7-9 which disclose the use of historical spending and shipping data to help the model forecast and analyze the plans in question);
- forecasting, by the processor, consumer demand and shipments in response to the at least one marketing plan and results of the econometric modeling (see paragraph 73 wherein the business planner builds shipment estimates and predicts supply chain demand related to the implementation of a particular promotion);
- executing, by the processor, a what-if scenario by enabling a user to make a change in planned spending on the at least one marketing element and using econometric modeling to quantify the effect of the change in planned spending on consumer demand, retail-load adjustments and shipments (see paragraph 29 where planned spending regarding promotional activities are entered into the system. Paragraphs 59-68 then disclose a lift model that details the effects/lift of various promotions, which includes calculating sales

and profit figures based on consumer demand and shipping information. Users may then tweak various aspects of the promotion in order to forecast and compare the effects of the different promotions being considered. ¶ [0102] also discloses an embodiment that analyzes and changes replenishment/retail load adjustments based on forecasted inventory levels related to the promotion being analyzed);

- modifying the at least one marketing plan based on the results of the what-if scenario to generate a modified marketing plan (see paragraph 59 wherein if the predicted results are in alignment, then the promotion may proceed to completion. If the predicted results are not in alignment, then a decision is made whether to modify the promotion plans or operation plans);
- executing the modified marketing plan and capturing actual consumer demand, retail-load adjustments, and shipment data (see paragraph 59 wherein the modified plan is implemented and paragraph 102 wherein an embodiment of the invention captures actual demand and shipment data. Additionally claim 35 captures shipping volume to market data and uses it to estimate sales); and
- displaying predictions pertaining to the planned promotion (see claim 43) and utilizing actual sales data to repeatedly refine the prediction model by comparing predicted data with actual data to maximize the model's utility and minimize future errors (see paragraph 78).

Schroeder does not explicitly disclose displaying (i) the forecasted consumer demand, the actual consumer demand, and a first percent error between the forecasted consumer

demand and the actual consumer demand; (ii) the forecasted retail-load adjustments, the actual retail-load adjustments, and a second percent error between the forecasted retail-load adjustments and the actual retail-load adjustments and (iii) the forecasted shipments, the actual shipments, and a third percent error between the forecasted shipments and the actual shipments.

The examiner hereby takes official notice that it was well known to those of ordinary skill in the art, at the time of the invention, to calculate and display percent errors between forecasted data and actual data when evaluating the predictive capacity of a particular model. Schroeder in fact discloses the comparison of forecasted and actual data but does not explicitly calculate percentages between the two. It was however, well known at the time of the invention to calculate and display the percentage difference between actual and forecasted data, for example Gatto (US 20030065601 A1) discloses a security analyst performance tracking and management system where one embodiment comprises a graphical display wherein the vertical axis may display a measure of the average percent error, both positive and negative, of the estimate for each analyst displayed as compared to actual earnings (see at least ¶ [0110]-[0111]).

Following KSR, the Supreme Court issued several rationales for supporting a conclusion that a claim would have been obvious. If a particular known technique was recognized as part of the ordinary capabilities of one skilled in the art, and one of ordinary skill in the art would have been capable of applying this known technique to a known device (method, or product) and the results would have been predictable to one of ordinary skill in the art; then the claim will be deemed obvious in view of the prior art.

Applicant is applying a known technique, in this case calculating and displaying percent errors between forecasted data and actual data, to a known device, in this case to forecasted and actual consumer demand, the forecasted and actual retail-load adjustments, and the forecasted and actual shipments, all of which are known elements disclosed by Schroeder, and is generating a predictable result. It would have been obvious, to one of ordinary skill in the art, that the result of applying the aforementioned technique would be a method for generating a predictive model that displayed the forecasted consumer demand, the actual consumer demand, and a first percent error between the forecasted consumer demand and the actual consumer demand, the forecasted retail-load adjustments, the actual retail-load adjustments, and a second percent error between the forecasted retail-load adjustments and the actual retail-load adjustments, as well as the forecasted shipments, the actual shipments, and a third percent error between the forecasted shipments and the actual shipments. Therefore since the Applicant is claiming the application of a known technique to a known device to yield a predictable result, the claim is deemed obvious in view of the prior art.

16. Regarding **claims 4 and 16**, Schroeder discloses a method and system to quantify marketing drivers and forecast at least one of consumer demand and shipments further comprising calculating a lift parameter of the at least one marketing element (see fig 1 and 2 wherein a lift model calculates the predicted lift that should result from a particular promotion and also paragraph 58).

17. Regarding **claims 7 and 19**, Schroeder discloses a method and system to quantify marketing drivers and forecast at least one of consumer demand and shipments wherein the at least one marketing plan comprises at least two of the following marketing

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elements: promotions, advertising, points of distribution or product changes (see figs 1-2 as well as paragraphs 18-30 and 57-58 wherein various marketing elements are being analyzed.).

18. Claims 9-11, 21-23, 30-32 and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schroeder (US 20030130883 A1) in view of Examiner's Official Notice as supported by Gatto (US 20030065601 A1), and further in view of Cox et al. (US 20020143604 A1) – hereinafter Cox.

19. Regarding **claims 9-11**, and **21-23**, Schroeder discloses a method and system to quantify marketing drivers and forecast at least one of consumer demand and shipments but fails to explicitly teach tracking the reasons for the forecast errors along with the forecast errors themselves.

Cox, however, discloses tracking the accuracy of a predictive model to assess its effectiveness as well as refining model assumptions (see paragraph 128), which are the reasons for the solution that the predictive model comes to. Therefore Cox effectively discloses tracking the errors, in the form of the differences between the predicted and actual values, as well as tracking and eventually refining the reasons for the errors, in the form of the assumptions used by the model to arrive at its predictions.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the method of Schroeder to include tracking the reasons for the forecast errors along with the forecast errors themselves in order to increase the accuracy of future predictions and enhance the effectiveness of the overall model. Since both references are interested in accurately forecasting demand and since the modification

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could have been performed readily and easily by one of ordinary skill in the art, with neither undue experimentation nor risk of unexpected results, a rejection under 35 U.S.C. 103(a) is appropriate.

20. Claims 25-41 substantially repeat the limitations recited in claims 1, 4, 7, 9-11, 13, 16, 19, 21-23. The main limitation differentiating claims 25 and 40-41 over the prior art applied to claims 1, 4, 7, 9-11, 13, 16, 19 and 21-23 is that the claims are directed to a computer readable medium comprising coded instructions which when executed perform the method steps recited in claims 1, 4, 7, 9-11, 13, 16, 19 and 21-23. This limitation is insufficient to patentably distinguish claims 25 and 40-41 over the prior art applied to claims 1, 4, 7, 9-11, 13, 16, 19 and 21-23 because embodying a method on a computer readable medium merely comprises the automation of a known process to replace an activity which accomplished the same result. The courts have held that broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art, *In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958). Therefore this limitation fails to patentably distinguish claims 25 and 40-41 over the applied prior art, since it would have been obvious to automate a known process by embodying instructions for performing the process on a computer readable medium.

The remaining limitations of claims 25-41 substantially repeat the limitations recited earlier in claims 1, 4, 7, 9-11, 13, 16, 19, 21-23 and are rejected for the reasons set forth with respect to the corresponding rejections of the limitations in question.

***Conclusion***

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADRIAN MCPHILLIP whose telephone number is (571)270-5399. The examiner can normally be reached on Monday to Thursday 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571)272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. M./

Examiner, Art Unit 3623

7/15/2011

/BETH V BOSWELL/

Supervisory Patent Examiner, Art Unit 3623